

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the patent of:

KONNO et al.

Patent Number: 5,397,432

Issued: March 14, 1995

For: METHOD FOR PRODUCING SEMICONDUCTOR INTEGRATED CIRCUITS AND
APPARATUS USED IN SUCH METHOD

REQUEST FOR CERTIFICATE OF CORRECTION

Assistant Commissioner

for Patents

Washington, D.C. 20231

March 10, 1997

Sir:

The undersigned requests that a Certificate of Correction be issued for the
above-identified patent as indicated on the attached Form PTO-1050.

REMARKS

This request is being made in order to correct our typographical error in
column 11, line 39 and the omission of symbols in Table-1. In support of the corrections
to Table-1, we are enclosing a copy of page 24 of the specification.

It is respectfully submitted that no new matter has been added.

Enclosed is a check for One Hundred Dollars (\$100.00) to cover any
necessary cost for this change. If however, any additional fees are due, please charge our
Deposit Account No. 14-1060.

Respectfully submitted,

NIKAIDO, MARMELSTEIN, MURRAY & ORAM LLP

George E. Oram, Jr.

Reg. No. 27,931

Atty. Case No. P698-1333

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Enclosures: PTO Form 1050; Copy of Page 24 of the Specification; Check # 12856

APPROVED

DEC 22 1998

FOR THE COMMISSIONER OF PAT. & T.M.

UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

PATENT NO. : 5,397,432

DATE : March 14, 1995

INVENTOR(S) : KONNO et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Conditions	Amount of residual chlorine umg/cm ² 10 ¹⁵ atoms/cm ²		After- corrosion	Symbols shown in FIG. 9
① Etching only	0.32±0.06	16.0±1.0	Large	○
② Downflow ashing using O ₂ after ①	0.39±0.06	15.5±1.0	Large	●
③ Downflow ashing using O ₂ +CF ₄ after ①	0.54±0.03	9.3±0.4	Small	■
④ Downflow ashing using O ₂ +H ₂ O after ①	0.23±0.03	4.0±0.5	No	◇
⑤ Exposure to H ₂ O after ② (30sec)	0.51±0.02	3.7±0.3	Small	▲
⑥ Exposure to H ₂ O after ② (90sec)	0.48±0.01	8.1±0.2	Small	▲
⑦ Exposure to H ₂ O after ② (180sec)	0.45±0.04	7.6±0.7	Small	▲
⑧ Downflow treatment using H ₂ O after ② (30sec)	0.29±0.01	4.7±0.2	None	△
⑨ Downflow treatment using H ₂ O after ② (90sec)	0.15±0.00	2.5±0.0	No	△
⑩ Downflow treatment using H ₂ O after ② (180sec)	0.11±0.01	1.9±0.1	No	△
⑪ Downflow treatment using H ₂ after ② (30sec)	0.68±0.01	11.8±0.2	Small	▼
⑫ Downflow treatment using H ₂ O after ② (90sec)	0.68±0.01	11.7±0.1	Small	▼
⑬ Downflow treatment using H ₂ after ② (180sec)	0.64±0.01	11.1±0.2	Small	▼

Exposure to H₂O: heated at 120° C. in water vapor at 0.1 Torr.

MAILING ADDRESS OF SENDER:

Nikaido, Marmelstein, Murray & Oram LLP
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Suite 330-G Street Lobby
Washington, D.C. 20005-5701
FORM PTO 1050 (REV. 2-87)

PATENT NO. 5,397,432

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UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 5,397,432
DATED : March 14, 1995
INVENTOR(S) : KONNO et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby
~~corrected~~ as shown below:

Column 11, line 39, delete "or" insert therefor -- and --.

5,397,432

MAILING ADDRESS OF SENDER:

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Metropolitan Square, 655 Fifteenth Street, N.W.
Suite 330-G Street Lobby
Washington, D.C. 20005-5701

PATENT NO. _____

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Table 1

Conditions		Amount of residual chlorine $\mu\text{m g/cm}^2$ 10^{15}atoms/cm^2		After- corrosion	Symbols shown in Fig. 9
①	Etching only	0.92 ± 0.06	16.0 ± 1.0	Large	○
②	Downflow ashing using O ₂ after ①	0.89 ± 0.06	15.5 ± 1.0	Large	●
③	Downflow ashing using O ₂ +CF ₄ after ①	0.54 ± 0.03	9.3 ± 0.4	Small	■
④	Downflow ashing using O ₂ +H ₂ O after ①	0.23 ± 0.03	4.0 ± 0.5	No	◇
⑤	Exposure to H ₂ O after ② (30sec)	0.51 ± 0.02	8.7 ± 0.3	Small	▲
⑥	Exposure to H ₂ O after ② (90sec)	0.48 ± 0.01	8.1 ± 0.2	Small	▲
⑦	Exposure to H ₂ O after ② (180sec)	0.45 ± 0.04	7.6 ± 0.7	Small	▲
⑧	Downflow treatment using H ₂ O after ② (30sec)	0.28 ± 0.01	4.7 ± 0.2	None	△
⑨	Downflow treatment using H ₂ O after ② (90sec)	0.15 ± 0.00	2.5 ± 0.0	No	△
⑩	Downflow treatment using H ₂ O after ② (180sec)	0.11 ± 0.01	1.9 ± 0.1	No	△
⑪	Downflow treatment using H ₂ after ② (30sec)	0.68 ± 0.01	11.8 ± 0.2	Small	▼
⑫	Downflow treatment using H ₂ O after ② (90sec)	0.68 ± 0.01	11.7 ± 0.1	Small	▼
⑬	Downflow treatment using H ₂ after ② (180sec)	0.64 ± 0.01	11.1 ± 0.2	Small	▼

Exposure to H₂O: heated at 120°C in water vapor at 0.1 Torr.

"FEE ADDRESS" INDICATION FORM

Address to:
Commissioner of Patents and Trademarks
Box M. Fee
Washington, D.C. 20231

Please recognize as the "Fee Address" under the provisions of 37 CFR 1.363 the following address:

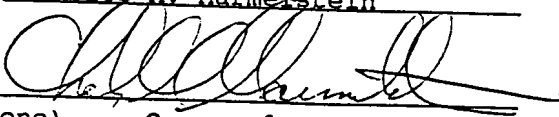
COMPUTER PATENT ANNUITIES
c/o COMPUTER PATENT ANNUITIES INC.
Suite 305
901 N. Washington Street
Alexandria, VA 22314
U.S.A.

Payor Number if assigned 000197

in the following listed application(s) or patent(s) for which the Issue Fee has been paid.

PATENT NUMBER (if known)	SERIAL NUMBER	PATENT DATE (if known)	U.S. FILING DATE
5,397,432	07/743,383	March 14, 1995	August 21, 1991

Typed name of person signing Charles M. Marmelstein

signed 
(check one) ☐ Owner of record
☒ Owner's attorney or agent of record
(Reg. No.) 25,895